Installation Guide

MVP-5150 5.2" Modero© ViewPoint© WiFi Touch Panel

Overview

The MVP-5150 Modero® Viewpoint® WiFi Touch Panel (**FG5966-07**) is a wireless ergonomic device, with all control established through a NetLinx Master. The MVP-5150 utilizes a 5.2" Color Active LCD to display a 800 x 480 pixel image with 262,144 colors, and comes with a pre-installed 802.11g WPA/WPA2 SDIO wireless card. For detailed installation, configuration, programming, file transfer, and operating instructions, refer to the *MVP-5100/50 Modero ViewPoint Touch Panel Operation/Reference Guide*, available online at **www.amx.com**.

FIG. 1 MVP-5150 touch panel

Specifications

MVP-5150 Specifications (FG5966-07)	
Dimensions:	4 3/4" x 7 9/16" x 13/16" (120.7 mm x 191.8 mm x 20.3 mm)
Weight:	• 1.25 lbs (0.57 kg)
Power Requirements (Without Charging):	Panel with battery fully charged or with no battery: • Constant current draw: 0.3 A @ 12 VDC • Startup current draw: 0.4 A @ 12 VDC
Power Requirements (While Charging):	Panel while charging battery: • Constant current draw: 1.1 A @ 12 VDC • Startup current draw: 1.3 A @ 12 VDC
Minimum Power Supply Required:	PS3.0 Power Supply (**FG423-30**) - both 120 VAC and 240 VAC models are shipped with this power supply.
Power Modes:	• AWAKE: All necessary modules are powered up and device remains online with the Netlinx Master. • ASLEEP: Only the backlight will be turned off after the user selectable time of inactivity has elapsed. ***Panel resumes the ON mode in ~ 1 second upon a momentary press of the touchscreen.*** • PROCESSOR SHUTDOWN: Power to all peripherals and components is turned off. The system remains in this mode until either it is rebooted or the battery is completely drained. The panel is re-activated by pressing the touchscreen and holding until the AMX splash screen appears.
Certifications:	• FCC Part 15 Class B • CE • IEC/EN-60950 • RoHS • Japan Approved • Lithium polymer microbattery: UN/IATA
Battery Duration:	• 2.5 days of *normal* use (25% On state, 25% Standby, and 50% Off). • Three hours of *continuous* use (continuous On state).
Memory:	• 128 MB Mobile DDRAM (upgrade not available) • 256 MB NAND Flash (upgrade not available)

MVP-5150 Specifications (Cont.)	
Screen Properties:	• Screen resolution: 800 x 480 pixels (HV) @ 60 Hz frame frequency • Type: WVGA • Aspect ratio: 16 x 9 • Brightness (luminance): 300 cd/m^2 • Channel transparency: 8-bit Alpha blending • Contrast ratio: 400:1 • Display colors: 262,144 colors (18-bit color depth) • Dot/pixel pitch: 0.23 mm • Panel type: TFT Color Active-Matrix
External Components	
Connector:	5-pin Mini-USB connector used for output to USB programming, firmware update, and touch panel file transfer between the PC and the target panel. **Note**: When connecting the panel to PC using a CC-USB (or compatible) cable, be sure to power the panel **On before** attempting to connect the USB cable from the PC to the mini-USB port on the panel.
Internal Components:	
IR Emitters:	Transmit IR over 20 feet (6.10 m) from the panel. • IR emitters on G4 panels share the device address number of the panel. • Transmits AMX fixed frequencies at 38KHz and 455KHz and user programmable frequencies from 20KHz to 1.5MHz
Operating/Storage Environment	• Operating Temperature: 0° C (32° F) to 40° C (104° F) • Operating Humidity: 5% - 85% RH • Storage Temperature: -20° C (-4° F) to 60° C (140° F) • Storage Humidity: 5% - 85% RH
Included Accessories:	• Installation Guide (**93-5966-07**) • PS3.0 Power Supply (**FG423-30**)
Other AMX Equipment:	• MVP-TCS-52: Table Charging Station (**FG5966-1X**) • MVP-WCS-52: Wall Charging Station (**FG5966-1X**) • MVP-BP-51S, Standard Capacity Replacement Battery Pack Kit (**FG5966-25K**) • MVP-BP-51H, High Capacity Replacement Battery Pack Kit (**FG5966-24K**) • MVP-STYLUS-52-GB: Black Stylus, Pack of 3 (**FG5966-21**) • CC-USB: USB Programming Cable (**FG10-5965**)

Connector Locations

With the unit facing you, the mini-USB port (for programming and downloading firmware) and the DC power jack are located on the lower left side of the device. The connector for the Table Charging Station and Wall-Mounted Charging Station is located on the bottom of the device. In cases where resetting the MVP-5150 is necessary or for access to the Setup Pages, a recessed reset button is located on the top left, which can be depressed using the included stylus.

The MVP-5150 utilizes the USB port for connection to a PC to facilitate panel downloads and firmware updates..

FIG. 2 MVP-5150 Connector Locations

WARNING: Transferring firmware KIT files over a direct USB connection should only be done when the panel is connected to a power supply. If battery power fails during a firmware upgrade, the panel flash file system may become corrupted.

Accessing the Setup Pages

The MVP-5150 features on-board *Setup* pages. Use the options in the *Setup* pages to access panel information and make various configuration changes.

To access the *Setup* pages, use the included stylus tip to press the recessed button on the left top side of the device and hold for three seconds. A popup screen opens that reads “Release button now to enter the Setup Pages. Continue holding to enter Calibration.” Releasing the recessed button at that time opens the main *Setup* page.

For more information, refer to the *Setup Pages* section of the *MVP-5100/50 Modero ViewPoint Touch Panel Operation/Reference Guide*, available at **www.amx.com**.

Accessing the Calibration Page

The *Calibration* page allows you to calibrate the touch panel for accurate button selection.

1. Press and hold the recessed button on the left side of the device until a screen appears that reads “Release button now to enter Calibration Page, Continue holding to shut down panel”. Release the button to open the *Calibration* page.
2. Press the crosshairs to calibrate the panel and return to the previous page.
3. This page may also be accessed through the *Protected Setup* page.
4. Always calibrate the panel before its initial use, and after downloading new firmware.

Accessing the Protected Setup Page

The *Protected Setup* page provides secured access to advanced panel configuration options, including communication and security settings. Enter the factory default password (**1988**) into the password keypad to access this page.

Setting the Panel’s Device Number

In the *Protected Setup* page:

1. Press the *Device Number* field to open the *Device Number* keypad.
2. Enter a unique Device Number assignment for the panel, and press **Done** to return to the *Protected Setup* page. The Device Number range is 1 - 32000, and the default is 0.

Configuring the Panel’s Wireless IP Settings

The first step to successfully setting up the internal wireless card is to configure the IP Settings section on the *Wireless Settings* page. This section configures the communication parameters from the MVP panel to the web.

Wireless Communication Using a DHCP Address

In the *Protected Setup* page:

1. Select *Wireless Settings*. Wireless communication is set within the *IP Settings* section of this page.
2. Toggle the *DHCP/Static* field (from the *IP Settings* section) until the choice cycles to DHCP. This action causes all fields in the *IP Settings* section other than Host Name to be greyed-out. Once the panel is rebooted, these values are obtained by the unit and displayed in the DNS fields after power-up.

   NOTE: DHCP will register the unique MAC Address (factory assigned) on the panel and once the communication setup process is complete, assign IP Address, Subnet Mask, and Gateway values from the DHCP Server.
3. Press the optional *Host Name* field to open a Keyboard and enter the Host Name information.
4. Press **Done** after you are finished assigning the alpha-numeric string of the host name.

Configuring the Card’s Wireless Settings

The second step of a successful setup of the wireless card is to configure the Wireless Security section of the *Wireless Settings* page. This section configures both the communication and security parameters from the internal wireless card to the WAP.

Configuring the Wireless Card for Secured Access to the WAP

In the *Protected Setup* page:

1. Select **Wireless Settings**.
2. Press the **Site Survey** button to access the *Wireless Site Survey* page.
3. Select a WEP secured WAP from within the Wireless Site *Survey* page, as displayed in the *Security* field, and press the **Connect** button to display the *Static WEP Settings* popup.
4. Enter the key length and values for matching the WAP and press **Save**.
5. The *Access Point MAC Address* field will now be filled.
6. Press **Back** to return to the *Protected Setup* page.

Consult the *MVP-5100/50 Modero ViewPoint Touch Panel Operation/ Reference Guide* for steps for manual entry of the SSID information.

Choose a Master Connection Mode

The panel requires the establishment of the type of connection to be made between it and the master.

In the *Protected Setup* page:

1. Select *System Settings*.
2. Select *Type* to toggle between the Master Connection Types *USB* and *Ethernet*.

   A USB connection is a direct connection from the panel’s mini-USB port to a corresponding USB port on the PC (acting as a Virtual Master).

   A Wireless Ethernet connection involves indirect communication from the panel to a Master via a wireless connection to the network.

Upgrading Firmware Via the USB Port

The MVP-5150 uses a 5-pin CC-USB (Type A) to Mini-B 5-Wire programming cable (**FG10-5965**) for programming, firmware updates, and touch panel file transfer between the PC and the target device. If a programming cable is not available, it may be purchased from **www.amx.com**.

Before beginning the upgrade, verify that the device is powered and the Type-A end of the USB connector is inserted and secure the PC’s USB port. The panel must be powered *On* before connecting the mini-USB connector to the panel. To guarantee that the upgrade is not interrupted by power loss, connecting the device to a power source, such as putting it in a Table Charging Station, before beginning the upgrade is highly recommended.

Step 1: Configure the panel for a USB Connection Type

1. After completing the installation of the USB driver, confirm the proper installation of the large Type-A USB connector to the PC's USB port, and restart the PC.
2. After the panel powers up, hold the reset button to display the *Setup Page* and open the *Protected Setup* page.
3. Press **System Settings** to open the *System Settings* page.
4. Toggle the blue *Type* field in the *Master Connection* section until the choice cycles to *USB*. **NOTE: ALL** fields are then grayed out and read-only. However, they still display any previous network information.
5. Press the **Back** button on the touch panel to return to the *Protected Setup* page.
6. Press the **Reboot** button to both save any changes and restart the panel. Remember that the panel’s connection type must be set to *USB* prior to rebooting the panel and prior to inserting the USB connector.
7. ONLY AFTER the unit displays the first panel page should you THEN insert the mini-USB connector into the Mini-USB Port on the panel. It may take a minute for the panel to detect the new connection and send a signal to the PC, indicated by a green *System Connection* icon.
8. Navigate back to the *System Settings* page.

For more information, refer to the *Upgrading Firmware* section of the *MVP-5100/50 Modero Viewpoint Touch Panel Operation/Reference Guide*, available at **www.amx.com**.

Cleaning the Touch Overlay and Case

The touch screen overlay should be cleaned after each day’s use to maintain the appearance of the device. Always use a clean cotton cloth and a spray bottle containing water or a vinegar-based cleaner, as alcohol-based cleaners can damage the device. **Do not directly spray the device**: instead, spray the cloth to clean the touch screen overlay. Do **NOT** use an abrasive of any type to clean the MVP-5150, as this may permanently damage or remove the device’s finish.

Battery Life and Replacement

The battery powering the MVP-5150 is designed for upwards of 300 deep discharge rechargings. Regular shallow rechargings will extensively increase expected battery life, and the device should be stored in either a Table Charging Station or Wall Charging Station when not in use to keep it at an optimum charge. The battery has reached its effective end of life after it can no longer hold more than a 70 percent charge.

The battery included with the MVP-5150 may be replaced with the MVP-BP-51H High Capacity Battery Pack Kit (**FG5966-24K**) for longer battery life. This kit contains the parts necessary to install the new battery, and may be purchased from **www.amx.com.**

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